



**STAN-EVAL NOTES**  
**CIVIL AIR PATROL VIRGINIA WING**  
**UNITED STATES AIR FORCE AUXILIARY**  
7401 Airfield Drive  
Richmond, Virginia 23237-2250  
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**Tail Strike Incident:** When one of our C182T aircraft was preflighted, damage to the tail cone was noted and the tail tie down ring had been sheared off. Although not definitive, it appears to have suffered a tail strike on a previous flight. However, it could not be determined from interviews with aircrews on the previous 5 sorties when the damage occurred. Aircrews should be able to state unequivocally based on a thorough preflight that the airframe is free of any external damage. Because of this incident and the fact VAWG could not determine when the damage occurred, the Middle East Region Commander has asked that basic preflight skills be emphasized and that operations that increase the risk of tail strikes be identified. All VAWG pilots should ensure that thorough preflights are done and that every item on the preflight checklist is accomplished. This should be supplemented by a visual inspection of the underside of the aircraft as this is an area where damage is most likely to occur. The underside is also the first clue to engine problems as excessive oil will often appear. Pilots should be aware that excessive flaring increases the risk of a tail strike. Flaring is required to avoid the nose wheel hitting the runway before the main gear has, but it can be overdone. Soft field, short field, and cross wind landings in gusty conditions all increase the risk of a tail strike. When a tail strike occurs, it may not be apparent to the aircrew especially in gusty conditions. Instructor pilots must instill in our pilots the discipline associated with a thorough pre flight and post flight inspection. Check pilots must ensure every applicant performs a thorough pre flight and post flight as part of any Form 5 Check Ride. Although these inspections are the responsibility of the PIC, all aircrew members should help to ensure that they are accomplished. Your safety, the safety of your fellow aircrew members and the reputation of VAWG are at stake.

**Electical Problems in a C172:** On a recent flight, the PIC noted that the taxi/landing lights did not appear to be working. The squawk was entered into WMIRS. However, later the operations officer noted sparking coming out of the lower console when the landing light or taxi light was energized. The a/c was inspected by an A&P who noted that there were burnt wires caused by an errant part in the console that caused intermittent shorts. The lesson learned is that even what appears to be a benign electrical problem (landing light inop) may actually be the symptom of a more serious problem. Electrical problems can be very serious when they occur in flight so double check any electrical anomaly to be sure it is not the symptom of a more serious issue.

**ASPEN Glass comes to VAWG:** VAWG has traded N9814L for N4813C. This aircraft is a refurbished C172 – new paint, new interior, and a new panel. The equipment list includes:

Aspen EDF 1000 Pro, Version 2.2  
Garmin GNS 430W GPS/Comm/Nav  
Garmin GMX 200 MFD  
Garmin GA 35 WAAS antenna  
Garmin GDL 69A Weather Uplink  
Garmin SL30 Nav/Comm  
Artex 406 ELT

Because of all the new equipment, we are going to require a checkout by a CAP instructor pilot (with an endorsement) to fly this C172 VFR. IFR privileges will require an abbreviated Form 5 by a qualified check pilot. N4813C will be initially based at KJYO.

**Mark your calendar:** VAWG will be hosting a workshop on Saturday 25 June at KFCI for instructor pilots, check pilots, and check pilot examiners. We are still working on the agenda but this will be an opportunity to explore topics that are not addressed in the online Form 5 course and will emphasize issues unique to Virginia Wing.

We are also hosting an ASPEN training session on Saturday 5 Feb at the KJYO terminal (2<sup>nd</sup> floor conference room) from 1300 to 1600. This will be taught by Susan Parson and Lynn Jensen. Send your name to [steve.hertz@ngc.com](mailto:steve.hertz@ngc.com) if you wish to attend. This is an unfunded event.

**Low Level Maneuvering:** We all know the dangers associated with low level maneuvering as it is often cited as a cause of accidents in the NTSB accident data base. As instructors, it's easy for us to tell our students "don't do it" but that's not very realistic. Takeoffs, landings, and instrument approaches are all examples of low level maneuvering that we do every day very safely. For CAP, our mission pilots can't do their job without "low level maneuvering". A better approach is to acknowledge that low level maneuvering is an inherent part of our flying and needs to be mastered. Low level maneuvering should be avoided when not required, but when required we can apply the principles of operational risk management to control risk and make for safe flying. Basic airmanship like terrain/obstacle awareness, airspeed awareness and control, and keeping the ball centered are essential. Avoiding steep banks at low altitudes is also a great risk reducer.

**Departure Procedures:** This note came from the FAA Safety.gov web service and is well worth reading. Although this was intended for IFR departures, this is an excellent way for a VFR pilot to depart an airport at night.

Some confusion exists as to what a pilot is supposed to do when a "Cleared as Filed" clearance is issued by ATC from an airport, but no Departure Procedure (DP) is assigned in the clearance. ATC at some airports may not issue a Departure Procedure as part of the clearance. However, the pilot is expected to determine a way to safely depart the airport and join the enroute structure defined in the ATC clearance (or flight plan if "cleared as filed"). One way to accomplish this—and normally the safest way in IMC—is to fly the appropriate published Departure Procedure. If a textual DP has been established for the airport, it will be found in the front of the U.S. Terminal Procedures Publication under TAKE-OFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES. (Digital procedures are available at [http://aeronav.faa.gov/index.asp?xml=aeronav/applications/d\\_tpp](http://aeronav.faa.gov/index.asp?xml=aeronav/applications/d_tpp).) If there is more than one Departure Procedure, the pilot should fly the one most appropriate to the route of flight. Absent specific departure instructions from ATC, the pilot may also elect to "climb on course," but only if he/she has determined that adequate terrain and/or obstruction clearance can be maintained until reaching the minimum IFR altitude (MIA), or minimum enroute altitude (MEA.) Weather conditions permitting, a pilot may request a "VFR climb" for the initial portion of the flight. While this will often expedite your departure clearance, note that this provision applies only to the vertical aspect of the ATC IFR clearance. The pilot is expected to follow the ground track as assigned, overflying the fixes or airways stated in the clearance. A "VFR climb" is not permission to deviate from the cleared route. As part of your IFR preflight planning always familiarize yourself with the airport written and graphic departure procedures. You may not

always be assigned one by ATC but you are expected to determine a safe departure method—a published DP is one way to accomplish that. Following a published DP is also appropriate if you depart VFR expecting to pick up an IFR clearance en route, especially at night when terrain features, such as mountains, are not clearly visible – just remember to stay VFR until you have your IFR clearance.

**ICS Requirements for all CAP Aircrew Members:** Because all CAP flying is mission flying (even those flying under a “C” mission symbol), no one may fly as an aircrew member on CAP aircraft without having completed IS 100 and IS 700. Mission Pilots must also complete IS 200. These courses are available at the FEMA website, there is no charge, the tests are open book, and each course takes about an hour to complete. After completion, go to the CAP website under OPS Qual and enter the completion. Upload a copy of the course completion certificate for validation. Check pilots, please be sure to check this on any check ride.

CAP and ROTC cadets flying on orientation flights are excluded from this requirement, as are Non-CAP members flying on approved missions such as Counter-Drug or Disaster Relief flights.

**Trend Analysis:** Here are the statistics for check rides given by VAWG for the second half of 2010 (July through December). We gave a total of 54 check rides (38 Form 5 and 16 Form 91). There were no failures on any of the Form 91 check rides. Of the 38 Form 5 check rides, there were three failures. The reasons given were: (1) Did not meet PTS standards, (2) Check pilot had to take the controls to avoid a stall in a short field landing, and (3) lack of proficiency.